

**DESIGN AND ENGINEERING SERVICES (DES)
STATEMENT OF WORK AMENDMENT
EPA REGION 7 – CHEROKEE COUNTY SUPERFUND SITE
REMEDIAL DESIGN TASK ORDER**

Added under Mod P00003 in 12/2020

New mod (4/2021)

PURPOSE

The purpose of this amendment is to prepare a remedial design (RD) of the selected remedy as defined in the operable unit's record of decision (ROD). This statement of work (SOW) sets forth the framework and requirements for conducting the RD activities at the Cherokee County Superfund site operable unit (OU) 8. The RD is generally defined as those activities to be undertaken by the contractor to develop the final plans and specifications, general provisions, and special requirements necessary to translate the ROD into the remedy to be constructed under the remedial action (RA) phase.

In accordance with current applicable laws, regulations, guidance and policies, the contractor shall furnish all necessary personnel with appropriate knowledge and expertise, materials, equipment, and services needed for, or incidental to, performing and completing work in accordance with the requirements of this statement of work.

The work areas under this DES Task Order (TO) are separated into three (3) functional areas (tasks):

1. General Requirements
2. Field Work and Analytical Support
3. Remedial Design (RD)

The contractor shall provide a cost/price proposal for all activities identified in this TO SOW in accordance with the pricing structure identified.

Site Background

The Cherokee County Superfund Site (Site) encompasses the Kansas portion of the Tri-State Mining District in the southeast corner of the state, see Figure 1. The Tri-State Mining District covers approximately 2,500 square miles in northeast Oklahoma, southwest Missouri and southeast Kansas. The Tri-State Mining District was one of the foremost lead-zinc mining areas of the world and provided nearly continuous production from about 1850 until 1970. During this period the district produced an estimated 500 million tons of ore, with about 115 million tons produced from the Kansas portion of the district. EPA has formerly listed four mining related Superfund Sites in the Tri-State Mining District. These are the Tar Creek, Oklahoma site, the Oronogo-Duenweg Mining Belt, Missouri site, the Newton County, Missouri site, and the Cherokee County, Kansas site.

The District is characterized by a variety of mine waste features that contain sparse to no vegetation. Local stream systems also contain mining wastes, mining-impacted sediments and mining-impacted surface water. Residential areas are adjacent to mine waste accumulations in

some areas or have suffered historic impacts as a result of smelting. Lead and zinc are found in mining wastes and soils at maximum concentrations of several thousand parts per million (ppm), while cadmium is typically found at levels less than 500 ppm.

The Cherokee County Superfund Site was placed on the National Priority List in 1983. As listed, the Cherokee County Site encompasses 115-square miles including the following seven subsites: Galena, Baxter Springs, Treece, Badger, Lawton, Waco, and Crestline. These seven subsites encompass most of the area where mining occurred within the Site and where physical surface disturbances were evident. The seven subsites of the Site are encompassed by eight OUs in order to facilitate remedial processes at the Site. The Site consists of mine tailings, soil, sediment, surface water, and groundwater contaminated with heavy metals (principally lead, zinc, and cadmium). The primary sources of contamination at the Site are the residual metals in the abandoned mine workings, chat piles, and tailing impoundments in addition to historic impacts from smelting operations. Numerous remedial and removal actions have taken place throughout the site as noted in RODs and Five-Year Reviews for the Site.

During the mining years, railroads were constructed in Cherokee County to join conventional large-scale railroads to the individual mining operations. As of 2000, approximately 142 miles of large-scale rail lines exist in Cherokee County. Historically, the ballast used in the railroad beds was composed of chat from surrounding mine waste piles. Traditionally, these historic railroads were abandoned when mining operations ceased at the mine(s) they serviced. Currently, the historic railroads that cross through private property exhibit extensive regrowth. The organic layer covering the chat ballast in forested areas is well developed owing to the almost constant supply of litter from the surrounding vegetation.

Recently, many rail lines were abandoned by railroad companies and reverted back to the property owner through the Surface Transportation Board. Plans also exist to convert some historic rail beds to the national Rails to Trails program. Several historic rail lines have been addressed during previous remedial actions on properties where they were encountered, see Figure 2. Some ballast may have been completely removed as a result of post-rail line construction activities, such as highway cuts. With the potential changes in land use, the exposure scenarios have changed. Large-scale rail lines have not been addressed previously.

OU3: Baxter Springs subsite

The EPA published its selected remedy, a mixture of residential soil remediation and source reduction, for the Baxter Springs and Treece subsites in a ROD in August 1997. EPA fund-lead work is being conducted under a ROD Amendment, signed in 2006. Both decision documents are very similar; the ROD Amendment primarily expanded the scope of the cleanup which includes the retracted technical impracticability (TI) waiver for surface water chemical-specific Applicable or Relevant and Appropriate Requirements (ARARs).

Nonresidential remedy components include the following: excavate, grade, and consolidate mining wastes and contaminated soil followed by capping and revegetation. Remove impacted sediments from drainages, fill mine shafts and collapse features. Institutional controls (IC) include the state of Kansas Environmental Use Controls (EUC) on most properties that contain capped wastes. Cleanup levels for OU3 and OU4 are 400 ppm lead, 1,100 ppm zinc, and 10 ppm cadmium.

The first phase of the EPA fund-lead RD and RA addressed both the Baxter Springs and Treece subsites and was completed in 2012. An EPA fund-lead RD was completed for the second phase in

2011 for both Baxter Springs and Treece subsites. EPA conducted a portion of the second phase RA that only addresses the Baxter Springs subsite. The third phase RD/RA was completed in 2019. The remaining work is to address an area originally remediated during the first phase RA and to complete the remaining RA work from the second phase RA.

Under this TO, the contractor shall conduct RD implementation activities for the Sunflower Mine Complex RA and Hessee/Lewis RA.

Under the P00003 TO amendment, the contractor shall conduct RD activities extending the Sunflower Mine Complex preliminary RD, a work area from the OU3 Phase III RD/RA, and remaining distal sites. The new design should be labeled as Phase 4.

OU4: Treece subsite

Nonresidential remedy components, in addition to Operation and maintenance (O&M) activities, are the same as described for OU3 above.

EPA completed a mine waste RA for several hundred acres in conjunction with the work described for OU3 above. The second phase mine waste RA for OU4 was completed in 2014. EPA began RD activities for the next phase of cleanup that will address the remaining mine waste in the Treece subsite.

Under this task order, the contractor shall conduct Pre-Final/Final RD and RD implementation activities for the Treece Phase 2 through 5 RD and RD implementation activities for the Webber Mine Complex RA.

OU8: Railroads

EPA selected a remedy in September 2016. The major components of the selected remedy include the following:

- Excavation and removal of all ballast material and contaminated soil with metals concentrations exceeding the cleanup levels of 1,770 ppm lead and 4,000 ppm zinc.
- Transportation of wastes to existing consolidation areas for consolidation and capping (OU3/OU4).
- ICs placed at consolidation areas so that the consolidation areas are not disturbed.
- O&M provided at the consolidation areas.

Under this modification, the contractor shall conduct RD and RD implementation activities for the Railroads RD for all OU8 rail lines.

Task 1: General Requirements

The general requirements section outlines activities that will be completed by the contractor for a majority of the task orders issued under this contract. The activities in this section include:

- 1.1 Systematic Project Planning;
- 1.2 Site-Specific Plan(s) Development;
- 1.3 Project Management, Monitoring and Reporting;
- 1.4 Task Order Close Out.

The need for these requirements and the amount of information/level or effort required are outlined in this SOW.

1.1 Systematic Project Planning

The following planning activities shall be conducted, as deemed appropriate, throughout the duration of the project. These activities include, but are not limited to:

- **Kickoff meeting.** Upon award of the task order, the contractor shall schedule a kickoff meeting with technical staff, quality staff, EPA, and other stakeholders to discuss the statement of work, site visit and document review needs. The meeting will also be used to outline project specific requirements including: project objectives, data gaps, potential sampling and analysis methods, and performance goals. The deliverable after the kickoff meeting will be a project schedule (in Microsoft Project format) and draft Site Management Plan. Scoping/Kickoff meetings will be documented in the UFP-QAPP. If the contractor is within a 2-hour drive, the meeting may be held in person, if not then the meeting will be held remotely. **Included in the initial TO award.**
- ~~Site visit to multiple locations throughout the Site for one senior level and mid level members of the site team (2 days, 1 night lodging)~~
- Review relevant background documentation. EPA will provide background documentation, previous design packages, and previous design contractor deliverables and data. See Appendix A. **The contractor shall incorporate their review of the background information and provided design packages and identify any data gaps with their relative importance within site-specific plans such as the UFP-QAPP.**
- **Conduct systematic planning meetings.** Throughout the duration of the project the contractor shall schedule systematic planning meetings to revisit project specific requirements and discuss any changes or modifications needed in project scope, schedule and/or budget. For cost estimation purposes, assume monthly 1-hour meetings with the project manager via conference call. The contractor shall prepare meeting agendas prior to the scheduled monthly meeting and prepare and send meeting minutes to the TOCOR within one week following the monthly meeting. **Included in the initial TO award.**

1.2 Site-specific Plan(s) Development

Review, prepare, update, and/or maintain relevant or required site-specific plans in accordance with applicable guidance. **This SOW Amendment includes data collection and RD tasks associated to OU3. Revisions to existing plans are necessary to incorporate this additional work.** Site work shall not commence on a project until EPA (the remedial project manager (RPM), contracting officer's personnel (COR) or other management personnel) have approved all the site-specific submittals required in the task order document. Some site-specific plans that may be requested include, but are not limited to the following:

- **(original TO award) Final Site Management Plan (SMP).** The SMP outlines the personnel, processes, procedures, and safeguards that will be used to ensure contaminants or pollutants are not released off-site during the implementation of the task order and how wastes that are encountered during task order activities will be managed and disposed, as appropriate.
- **Revised Final Site Management Plan (SMP).** The SMP outlines the personnel, processes, procedures, and safeguards that will be used to ensure contaminants or pollutants are not released off-site during the implementation of the task order and how wastes that are

- encountered during task order activities will be managed and disposed, as appropriate.
- **(original TO award) Streamlined Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP)** for data review. A UFP-QAPP is a formal document describing in comprehensive detail the necessary quality assurance (QA), quality control (QC), and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A UFP-QAPP integrates technical and quality control aspects of a project throughout its life cycle, including planning, implementation, assessment, and corrective actions. The **streamlined UFP-QAPP for this Site** will provide:
 - Data quality objectives (DQO) that specify the data needed to support decisions regarding remedial response activities.
 - **Revised Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP) for data collection**. A UFP-QAPP is a formal document describing in comprehensive detail the necessary quality assurance (QA), quality control (QC), and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A UFP-QAPP integrates technical and quality control aspects of a project throughout its life cycle, including planning, implementation, assessment, and corrective actions. The **revised UFP-QAPP for this Site** will provide:
 - Data quality objectives (DQO) that specify the data needed to support decisions regarding remedial response activities.
 - **Field sampling plan (FSP)** that describes the number, type, and locations of samples and types of analyses. Use the previous Site FSPs for development of the task order FSP.
 - **Revised Data Management Plan (DMP)**. The DMP will detail the standard processes, procedures and tools that the contractor will use to support response activities and include requirements for all EPA data deliverables. The DMP will be developed in accordance with EPA national and region-specific data management plans or guidance, including SOP 2341.01A R7 Geospatial Data Deliverables. For cost estimating purposes, assume Microsoft Excel software can be utilized for data management purposes.
 - **Health and Safety Plan (HASP)**. The HASP specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan.
 - **Revised Health and Safety Plan (HASP)**. The **Revised** HASP specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan.

These plans may require updating/modifying during the period of performance if project conditions change.

1.3 Project Management, Monitoring and Reporting

The contractor shall perform activities required to manage the task order effectively. Activities include: preparing monthly progress reports and invoices for the task order; monitoring cost and performance; and updating project schedules during the projects as requested by the Task Order Contracting Officer's Representative (TOCOR). Subcontract management and procurement costs shall be billed under the task to which they apply. The Executive Progress Report and Monthly Regional Summary described under Category 1: Contract-Level Deliverables under the DES national contract Attachment 5 – RAF Contract and Task Order

Deliverables are not required under this task order.

Throughout the project, the contractor shall avoid duplication of prior efforts in gathering and assimilating project or site information. The contractor shall utilize the most applicable and current regulations and guidance documents when conducting work. The contractor shall continually look for and implement ways to streamline activities and minimize costs without compromising quality. The contractor shall assign work to personnel at the appropriate professional and/or technical levels and with the appropriate skill to most efficiently perform the task(s). **Included in the initial TO award.**

1.4 Greener Cleanups and Sustainability Considerations

These items shall be considered as noted in the contract level SOW.

1.5 Optimization Considerations

These items shall be considered as noted in the contract level SOW.

1.6 Community Involvement

Not Applicable.

1.7 Task Order Close Out

The contractor shall close out task orders. Activities include but are not limited to returning documents to EPA or other document repositories, file duplication, distribution, and storage, file archiving to meet Federal Records center requirements, and preparation of a close-out report.

Task 2: Field Work and Analytical Support

This section also outlines expectations for the contractor to manage, analyze evaluate and report data and information from field activities. All analytic work shall be done in compliance with the EPA Forum on Environmental Measurement Competency Policy (Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency funded Acquisitions (Agency Policy Directive Number FEM 2011-01)).

The activities in this section include:

- 2.1 Field Investigation;
- 2.2 Analytical Support and Data Validation; and
- 2.3 Data Management and Evaluation

2.1 Field Investigation

To conduct field investigation activities, the contractor shall perform all or a specified subset of the activities listed below. Where appropriate, activities should be performed in accordance with the EPA-approved UFP-QAPP:

2.1.1 Access and correspondence with property owners as prescribed by data needs identified in the site-specific work plans and in consultation with the TOCOR.

- The contractor shall provide the TOCOR with a draft request for access letter for EPA comment and approval. An EPA template consent for access form will be provided electronically per Appendix A.
- The contractor shall attempt and log access to properties with two letter attempts and one phone call. If still unsuccessful in gaining access due to no response or denial, the contractor shall elevate to the TOCOR within two (2) days of the final attempt for access.
- The contractor shall provide EPA with an electronic copy of all signed access agreements and an Excel spreadsheet of all access attempts and property information.

Access may have been granted for a number of properties as part of previous remedial efforts. For costing purposes, assume that access will be needed to 12 properties.

2.2 Analytical Support and Data Validation

The contractor may be required to perform analytical support and data validation activities.

These activities may include:

- 2.2.1** Environmental sample collection;
- 2.2.2** Analytical Services and Support; and
- 2.2.3** Data validation

2.2.1 Environmental sample collection

The contractor shall provide personnel and equipment to collect environmental samples. The contractor shall capture sampling, observational, and monitoring field data and provide this data to EPA in a Scribe-compatible data deliverable. A logbook shall be kept as record of activities for all field events. In addition to the required Scribe-compatible data deliverable, the contractor may also deliver data in a Microsoft Excel file. Samples collected may include, but are not limited to, sample matrices such as solids, water, soil, and sediments. The contractor shall collect, handle and transport samples in accordance with the project-specific UFP-QAPP. The contractor shall be responsible for submitting timely Analytical Service Requests (ASRs) to the EPA R7 lab.

For cost estimating purposes, assume two (2) one-week trips for two (mix of mid-level and jr. scientist/technicians) staff for performance of sampling activities for the RD. Assume the rental of an XRF unit for the screening sampling activities for the RD. Confirmatory samples are assumed to be analyzed by the EPA R7 lab and analysis should not be included in cost estimates.

2.2.2 Analytical Services and Support

Throughout the project planning and implementation, the contractor shall work with the TOCOR on selection of analytical services per this SOW and the contract level SOW. The contractor shall request and perform analytical services in compliance with EPA requirements. The contractor shall be responsible for submitting timely Analytical Service Requests (ASRs) to the EPA R7 lab for the RD sampling.

For cost estimating purposes, it is assumed that all samples shall be analyzed at the R7 Laboratory.

It is assumed that approximately two (2) ASRs are required for this work. Assume costs for this subtask under subtask 2.2.1.

2.2.3 Data Validation

The EPA Region 7 Laboratory will conduct data validation on samples analyzed at the Region 7 Laboratory. The contractor shall conduct data validation activities and provide data validation of data packages and electronic deliverables per the contract level SOW for any samples analyzed at outside laboratories.

For cost estimating purposes, it is assumed that all samples shall be analyzed at the R7 Laboratory.

Also, upon completion of the data validation, the contractor shall send data transmittal letters to corresponding property owners as determined by the TOCOR and as specified in the Deliverables Table. For cost estimating purposes, it is assumed that 12 data transmittal letters shall be prepared and sent to property owners within 30 days of receipt of data.

2.3 Data Management and Evaluation

The contractor shall provide data management support services as specified in the contract level SOW. The contractor shall provide a data evaluation technical memorandum for each field event. Each memo should include information such as: description of field activities performed, data collected, figures depicting data, and deviations from the workplan. For cost estimating purposes assume that there are two (2) field events and two (2) memos.

Task 3: Treatability Studies

Not Applicable.

Task 4: Remedial Investigation/Feasibility Study (RI/FS)

Not Applicable.

Task 5: Engineering Evaluation/Cost Analysis (EE/CA)

Not Applicable.

Task 6: Remedial Design (RD)

The RD is a series of engineering reports, documents, specifications, and drawings that detail the steps to be taken during the remedial action to meet the goals established in the ROD. This section sets forth the basic framework for this effort. The activities in this section include:

- 6.1 RD/RA Project Delivery Planning (Not Applicable);
- 6.2 Value Engineering (Not Applicable);
- 6.3 Preliminary Design (Not Applicable);
- 6.4 Intermediate Design (Not Applicable);
- 6.5 Pre-final/Final Design; and
- 6.6 Remedial Design Implementation Support

This approach should be viewed as a dynamic and flexible process that will be tailored to specific circumstances at individual sites in the specific task order document.

6.1 RD/RA Project Delivery Planning

Not Applicable.

6.2 Value Engineering (VE)

Not Applicable.

6.3 Preliminary Design

Not Applicable.

6.4 Intermediate Design

Not Applicable.

6.5 Pre-final/Final Design

The contractor shall prepare pre-final/final designs. The pre-final design is a design that is considered 90% complete. Previous design packages for OU3 with the relevant EPA/stakeholder comments will be provided electronically per Appendix A. Documents shall be provided in an electronic format in addition to two (2) printed full-set of final design drawings. The contractor shall complete a pre-final and/or final design as noted below:

OU3: Baxter Springs subsite (REVISED OPTION)

This task includes work efforts related to the preparation of the pre-final/final design of the total design limits seen on Figure 3. This amended SOW adds:

- 1. Inactive rail lines that extend from the Sunflower Mine Complex pre-final design**
- 2. OU3 Phase III Work Area #5 re-design**
- 3. Additional OU3 distal sites (Baxter Springs baseball field and Swalley distal site)**

Incorporate all areas into a pre-final design for OU3 Phase 4 to include all remaining OU3 work areas (original TO SOW for 6.5_Pre-final/Final Design - OU3 Baxter Springs (Option) + amended SOW for 6.5_Pre-final/Final Design – OU3 Baxter Springs subsite (Revised Option)). Assume all electronic deliverables under this task, unless otherwise noted. Typical components include, but are not limited to, the following:

- The contractor shall develop pre-final and final design specifications
- The contractor shall provide pre-final and final design drawings and schematics.
- The contractor shall provide a pre-final/final basis of design report /design analysis.
- The contractor shall provide pre-final/final revised RA and O&M cost estimates (+15% and -10% accuracy) prepared through the use of M-CACES Gold Cost

Engineering System for Remedial Action or other software acceptable to the region.

- The contractor shall hold a pre-final/final briefing for EPA to discuss the design, via conference call.
- The contractor shall conduct a biddability (offerability), operability, constructability, claims prevention, and environmental compliance reviews.
- The contractor shall update/revise the project delivery strategy.
- The contractor shall provide 100% design submittal, which shall include the final plans and specifications in reproducible format, final cost estimate, and a schedule of the overall RA.

OU3: Baxter Springs subsite (OPTION)

~~This is an optional task under this task order. The deliverables for the **OU3: Baxter Springs — Sunflower Complex pre-final/final design** shall include the following:~~

- ~~• The contractor shall develop pre-final and final design specifications~~
- ~~• The contractor shall provide pre-final and final design drawings and schematics.~~
- ~~• The contractor shall provide a pre-final/final basis of design report /design analysis.~~
- ~~• The contractor shall provide pre-final/final revised RA and O&M cost estimates (+15% and -10% accuracy) prepared through the use of M-CACES Gold Cost Engineering System for Remedial Action or other software acceptable to the region.~~
- ~~• The contractor shall hold a pre-final/final briefing for EPA to discuss the design, via conference call.~~
- ~~• The contractor shall conduct a biddability (offerability), operability, constructability, claims prevention, and environmental compliance reviews.~~
- ~~• The contractor shall update/revise the project delivery strategy.~~
- ~~• The contractor shall provide 100% design submittal, which shall include the final plans and specifications in reproducible format, final cost estimate, and a schedule of the overall RA.~~

OU8: Railroads (all OU8 rail lines)

The contractor shall review the EPA-provided pre-final design package for the EPA-lead portion of the rail lines and the preliminary design package in the contractor's possession for the remaining OU8 rail lines.

Included in the initial TO award. The contractor shall prepare a technical memorandum that incorporates an understanding of the OU8 selected remedy and the pre-final design package. The technical memorandum shall identify potential repository space(s) for the estimated volume of wastes. The memorandum should include information such as: description of proposed repository locations, estimated capacity, property ownership information, a comparative analysis of the locations, identified or potential challenges or benefits, and figures. **For cost estimating purposes, assume that the EPA will provide an initial list of potential repository locations.**

The deliverables for the **OU8: Railroads final design** (all OU8 rail lines) shall include the following:

- Final Design report;
- Final Design specifications;
- Final Design Drawings;
- Final construction and O&M cost estimate; and
- Final construction schedule

6.6 Remedial Design Implementation Support

Included in the initial TO award. The contractor shall provide support after an RD is finalized and before the RA is completed. This will include those activities which require architect and engineer expertise as it relates to implementing the plans and specifications of the RD for each OU. Typical activities include, but are not limited to, the following per OU:

For cost estimating purposes, assume the following for OU3:

- Attend two (2) one-hour briefings or technical meetings with one senior-level and mid-level members of the site team. If the contractor is within a 2-hour drive, the meeting may be held in person, if not then the meeting will be held remotely;
- Prepare presentation materials for each of the estimated number of briefings/meetings;
- Conduct a one-night site visit to Cherokee County, Kansas for one senior-level and mid-level members of the site team for technical assistance during remedial action;
- Provide interpretation and/or technical clarification of plans and specifications during the solicitation.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated two (2) hours per week for 12 weeks with support from senior level staff and technical staff.
- Provide interpretation and/or technical clarification of plans and specifications during remedial action.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated two (2) hours per month for 24 months with support from senior level staff and technical staff; and
- Provide any technical design assistance for modifications to final design or specifications that may be required during the remedial action as a result of changed or unanticipated conditions, remedial action contractor-proposed changes, or other changes.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via email and/or technical memorandum for an estimated eight (8) hours per quarter (four times in a 12-month period; eight times in a 24-month period) with support from senior level staff and technical staff.

For cost estimating purposes, assume the following for OU4:

- Attend two (2) one-hour briefings or technical meetings with one senior-level and mid-level members of the site team. If the contractor is within a 2-hour drive, the meeting may be held in person, if not then the meeting will be held remotely;
- Prepare presentation materials for each of the estimated number of briefings/meetings;
- Conduct a one-night site visit to Cherokee County, Kansas for one senior-level and mid-level members of the site team for technical assistance during remedial action;

- Provide interpretation and/or technical clarification of plans and specifications during the solicitation.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated two (2) hours per week for 12 weeks with support from senior level staff and technical staff.
- Provide interpretation and/or technical clarification of plans and specifications during remedial action.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated two (2) hours per month for 24 months with support from senior level staff and technical staff; and
- Provide any technical design assistance for modifications to final design or specifications that may be required during the remedial action as a result of changed or unanticipated conditions, remedial action contractor-proposed changes, or other changes.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via email and/or technical memorandum for an estimated eight (8) hours per quarter (four times in a 12-month period; eight times in a 24-month period) with support from senior level staff and technical staff.

For cost estimating purposes, assume the following for OU8 (all OU8 rail lines – assumed no change in cost estimating assumptions):

- Attend five (5) one-hour briefings or technical meetings with one senior-level and mid-level members of the site team. If the contractor is within a 2-hour drive, the meeting may be held in person, if not then the meeting will be held remotely;
- Prepare presentation materials for each of the estimated number of briefings/meetings;
- Conduct a one-night site visit to Cherokee County, Kansas for one senior-level and mid-level members of the site team for technical assistance during remedial action;
- Provide interpretation and/or technical clarification of plans and specifications during the solicitation.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated two (2) hours per week for 12 weeks with support from senior level staff and technical staff.
- Provide interpretation and/or technical clarification of plans and specifications during remedial action.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated six (6) hours per month for 24 months with support from senior level staff and technical staff; and
- Provide any technical design assistance for modifications to final design or specifications that may be required during the remedial action as a result of changed or unanticipated conditions, remedial action contractor-proposed changes, or other changes.
 - For cost estimation purposes, assume a mid-level engineer, or equivalent, shall provide technical assistance and information via email and/or technical memorandum for an estimated eight (8) hours per quarter (four times in a 12-month period; eight times in a 24-month period) with support from senior level staff and technical staff.

Task 7: Oversight or Oversight Support

Not Applicable.

Task 8: Other Work Areas/General Technical Assistance

Included in the initial TO award. The contractor shall provide the following support under this task:

8.1 Technical Assistance Meeting and Support

Included in the initial TO award. The contractor shall provide support related to attendance at and documentation of meetings with EPA, potentially responsible parties (PRPs), the PRP contractor, and other stakeholders at OU3, OU4, and OU8. The contractor shall attend various meetings throughout the performance of the task order document. These meetings are in addition to the meetings specifically included within other tasks in this SOW. The contractor may be required to prepare meeting minutes or comments. Also, provide technical assistance in the development and/or review of technical information/documentation relating to the site (e.g., application of a specific technology on a specific site).

For cost estimating purposes, assume one senior and one mid-level members of the site team to participate in an estimated three (3) one-hour meetings via conference call every 12-month period. For cost estimation purposes, assume a senior or mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated 10 hours every 12-month period with support from senior level staff.

8.2 Targeted Brownfields Assessment (TBA)

Not Applicable.

8.3 EPA-lead Remedial Action (RA) or EPA-lead Removal Action (RV) Support

Not Applicable.

8.4 Five-Year Review

Not Applicable.

8.5 Optimization Reviews

Not Applicable.

8.6 Radiation Support

Not Applicable.

8.7 Negotiation, Litigation, and Expert Witness Support

Included in the initial TO award. The contractor shall provide services to assist with negotiation and litigation, including negotiation support for consent decrees and administrative order. This includes but is not limited to producing site documents to support discovery activities via electronic transmittal; preparing for the provision of expert testimony during litigation; attending and assisting in negotiation sessions and meetings. The contractor shall not prepare testimony for expert witnesses who are not EPA personnel.

For cost estimating purposes, assume one senior and one mid-level members of the site team to participate in an estimated three (3) one-hour meetings via conference call every 12-month period. For cost estimation purposes, assume a senior or mid-level engineer, or equivalent, shall provide technical assistance and information via phone and/or email for an estimated 10 hours every 12-month period with support from senior level staff.

8.8 Records Management and Administrative Support

Not Applicable.

8.9 Equipment/Services/Utilities, Site Maintenance and Site Security/Guard Services

Not Applicable.

8.10 EPA Initiatives

Not Applicable.

Proposed Deliverables Table

The table below identifies proposed deliverables for this task order. All final documents are due within 15 days after receipt of EPA comments, unless otherwise requested or specified on the deliverables table. Days listed in this table are calendar days. It is expected that all deliverables will be in electronic format.

Task	Deliverable	Due Date
1.1	Site Visit	30 days after TO amendment
	Review relevant background documentation	15 days after TO amendment
	Revised Site Management Plan	30 days after TO amendment
1.2	Revised UFP-QAPP with FSP	Draft 45 days after TO amendment
	Revised Final SMP	15 days after receipt of EPA comments
	Revised Data Management Plan	Draft 30 days after TO amendment
	Revised Health and Safety Plan	Draft 30 days after TO amendment
2.1	Signed Access Agreements/Access Tracking Spreadsheet	To Be Decided Based Upon Prior Activities
2.2.3	Data Transmittal Letters	
2.3	Data Evaluation Technical Memorandums	
6.5	OU3: Baxter Springs pre-final design (revised option)	
6.5	OU3: Baxter Springs final design (revised option)	

Figure 1. Cherokee County - Subsite Location Map

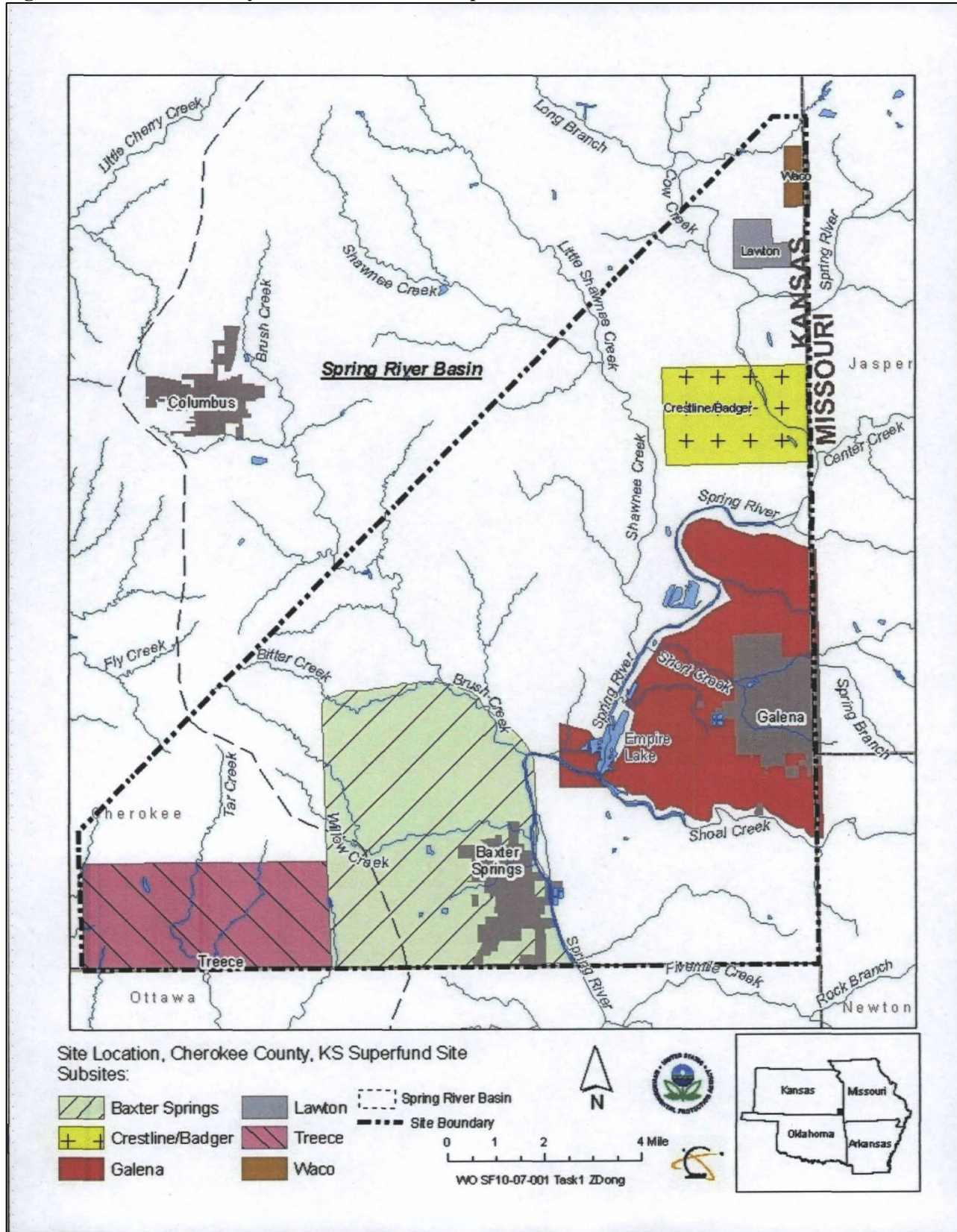


Figure 2. Cherokee County OU8 Map from OU8 FS Report

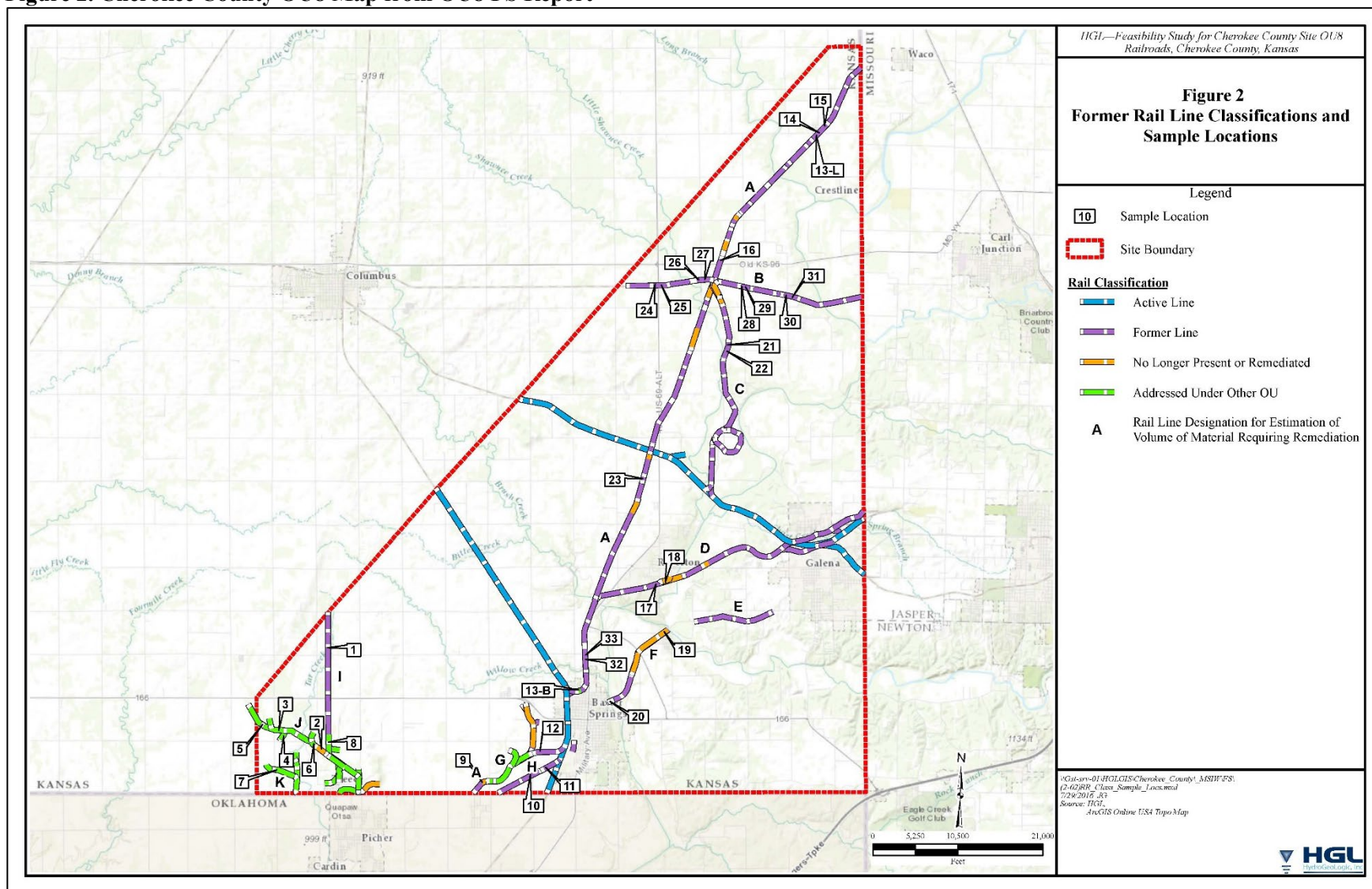
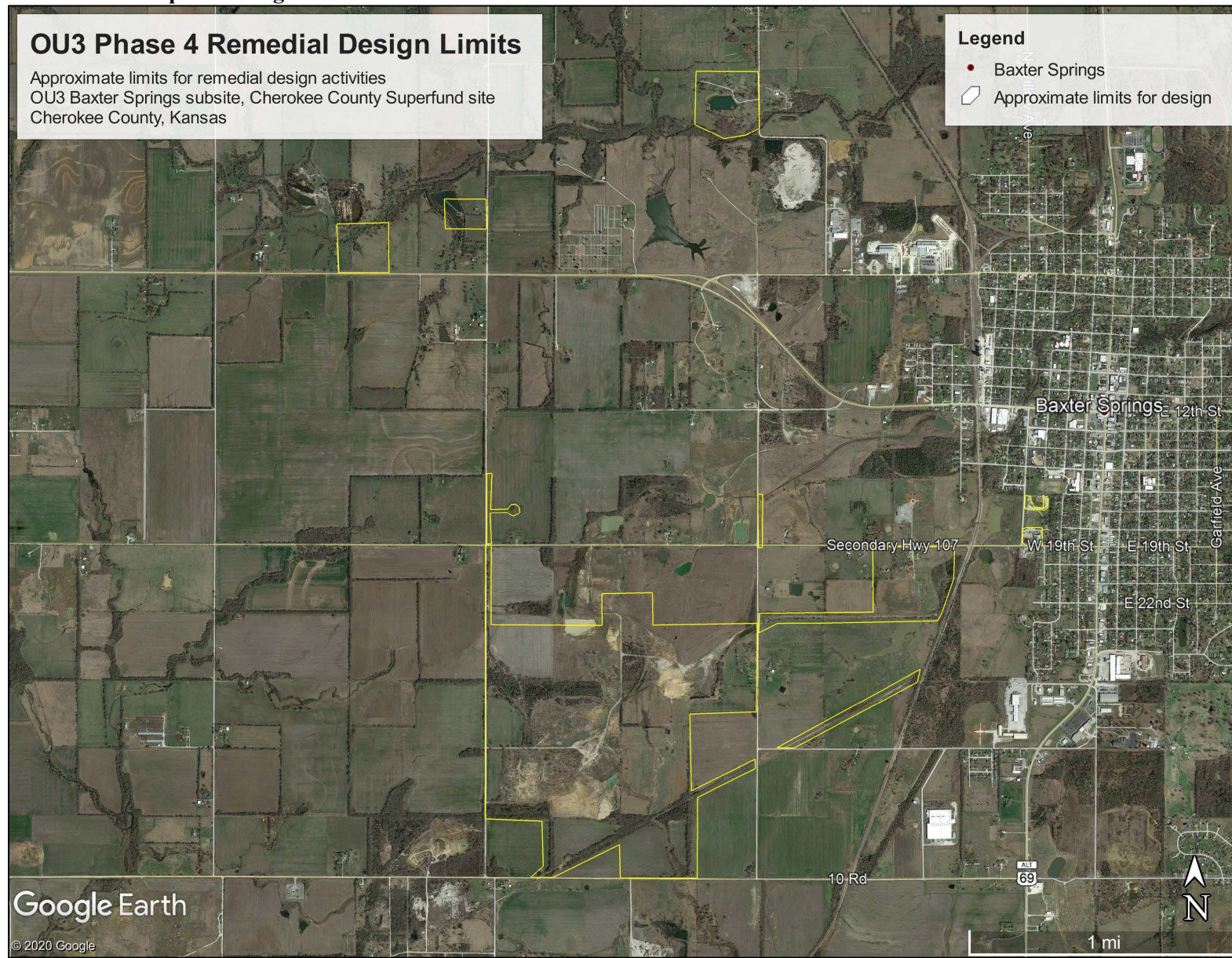


Figure 3. OU3 Phase 4 Proposed Design Limits



Appendix A. List of background documentation, previous design packages, and previous design contractor deliverables and data

OU3 Baxter Springs subsite

- 1997 ROD found online at: <https://semspub.epa.gov/work/07/72046.pdf>
- 2006 ROD Amendment and supporting documents found on online AR: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.ars&id=0700667&doc=Y&colid=64508®ion=07&type=AR>
- Preliminary Design documents for the Sunflower Mine Complex to be provided electronically
- Preliminary Design documents for the Hessee/Lewis property to be provided electronically
- Template EPA Consent for Access form to be provided electronically
- EPA comments to Preliminary Design documents to be provided electronically
- KDHE comments to Preliminary Design documents to be provided electronically
- Final RA report for OU3 Phase III RA to be provided electronically, including as-builts

OU4 Treece subsite

- 1997 ROD found online at: <https://semspub.epa.gov/work/07/72046.pdf>
- 2006 ROD Amendment and supporting documents found on online AR: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.ars&id=0700667&doc=Y&colid=64508®ion=07&type=AR>
- 2016 ROD Amendment and supporting documents found on online AR: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.scs&id=0700667&doc=Y&colid=34504®ion=07&type=SC>
- Final Design documents for the Webber Mine Complex to be provided electronically

OU8 Railroads

- 2016 ROD and supporting documents found on online AR: <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.ars&id=0700667&doc=Y&colid=62822®ion=07&type=AR>
- Preliminary Design documents to be provided electronically
- Pre-Final Design documents to be provided electronically